Claims

1. Drive unit for motor vehicles, comprising an internal combustion engine (1) and an automated shift gearbox, which has an input shaft drivingly joined to the engine crankshaft and which is controlled by a control means (45, 48), connected to a gear selector (46), and having a transmission control function and an engine control function, and to which are fed signals representing the selected gear and various engine and vehicle data, which comprise at least engine speed, rotational speed of the transmission input shaft and vehicle speed, **characterized in** that the input shaft (7) of the gearbox is coordinated with a torque sensor (60), which provides a signal dependent on the torque on said input shaft to said control meanss, and that the control means (45,48) are arranged to continuously register the current torque on the input shaft, to utilize the torque signal from the torque sensor for calculating the current vehicle motion resistance and selecting a gear on the basis of the calculated vehicle motion resistance.

2. Drive means according to Claim 1, **characterized in that** the gearbox is a step gearbox and has an input shaft (7) connected via a disc clutch (3) to the engine crankshaft, said step gearbox (9) having at least one intermediate shaft (11) mounted in a housing, said intermediate shaft (11) having at least one gear (16, 17) in engagement with a gear (12, 15) on the input shaft, a main shaft (10) which is mounted in the housing and has gears (15, 21, 22, 23) engaging gears (17, 18, 19, 20) on the intermediate shaft, at least one gear in each pair of interengaging gears on the intermediate shaft and the main shaft being rotatably mounted on its shaft and lockable by engaging means (13, 24, 25) of which at least some forward gears lack a synchronization function.